LOANS VERSUS TAXES IN WAR FINANCE

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The fiscal problems of the war may be divided into those of a general and of a specific character. War expenditures can be met in three ways: by taxes, by loans, or by paper money. The specific problems have to deal with the nature and the details of each of these expedients; the general problem is concerned with the principles that underlie the preference among the respective methods. Inasmuch as paper money is by common consent to be regarded as the last resort, the general problem at issue here pertains to the choice between loans and taxes and the relative proportions in which each is to be employed.

If we look at the facts we observe a marked change in modern warfare. In former times, whether in classic antiquity or in the Middle Ages, the expenses of war were defrayed in large measure out of accumulated funds or treasures reënforced by taxes, and were reimbursed to the victor by the booty of war and the indemnities imposed upon the vanquished. Since the development of public credit, especially since the middle of the eighteenth century, loans have taken the place of the accumulated treasure and taxes have been utilized chiefly for the purpose of raising the interest on the war loans and of furnishing in addition a more or less considerable amortization quota.

The facts of the present war are no different. During the last fiscal year Great Britain raised by taxation slightly over 17 per cent of her war expenses; Italy, although also levying heavy taxes, has raised a still larger proportion than England by loans; in Germany only an insignificant fraction of the war expenses has been met by taxes; in France, as a result partly of the occupation of its territory by the enemy, the taxes hitherto levied during the war have not sufficed even to pay the ordinary peace expenses; while Russia has been in a still worse position. Although there is indeed a notable difference between the zero of France and the 17 per cent of Great Britain, the fact remains that in all the countries, with-

out exception, the overwhelming proportion of war expenditures has been met through loans.

The same thing is true of the United States. We have been told that our war expenditures for the present fiscal year will be about nineteen billions while the sum to be yielded by the new revenue bill is about two and a half billions or about 13¼ per cent of the whole. Even if there are included about one billion of peace expenditures and if we add that part of the previous tax revenue which might fairly be chargeable to the war or to war preparation, the proportion to be raised by loans will not differ materially from that of England. If we should exclude from the war expenditures the seven billions to be advanced to our allies, the amount to be raised by taxation, under the new revenue bill, would even then only be slightly over 21 per cent of the whole.

Several months ago an American economist[1] made the following statement: "I am strongly of the opinion that a great modern war, enormously costly as it is, can and should be mainly, if not entirely, financed from the proceeds of taxes collected during its progress."

Similar opinions have been voiced by others and have found expression in Congressional speeches, and a more or less faint echo of that pronouncement has even been audible in certain statements emanating from the executive branch of our government.

Why have the actual methods diverged so greatly from these suggestions? How does it happen that the statesmen and the legislators in every belligerent country, including our own, have done the opposite? Why, instead of raising from 50 to 100 per cent by taxes, has none of the belligerents raised as much as 20 per cent, or, at the outside, 25 per cent, of the war expenses by taxes? Shall we convict the European and American statesmen of folly and fiscal madness? Or is it perhaps true that the suggestions, so unavailingly made to the contrary, have been based upon an inadequate analysis?

This is the problem to which we shall now address ourselves.

I. What Do We Mean By War Costs?

The first point in our analysis is to ascertain what is meant by the costs of war. It is obvious that a distinction must be made between the money costs and the real costs of a war. The money

[1] O. M. W. Sprague, "The Conscription of Income," in the *Economic Journal*, March, 1917, p. 2.

costs of a war are the actual outlays of the government for war purposes, that is, the surplus above the general expenditures in time of peace, making due allowance for changes in the purchasing power of money. The real costs of a war, on the other hand, are to be calculated very differently. When the ordinary man speaks of wealth he thinks of accumulated capital. The more sagacious thinker, however, is aware that the real wealth of a community consists in larger part of the results of current production. Accumulated capital is of importance chiefly as an aid to current production. It has been calculated that the world is always within a year and a half of starvation. If current production were suddenly to cease, the world's stores of food and other products would barely suffice for eighteen months. A wealthy country is one where the consumption of the people is great and variegated and where the current production is so large that there will still be a substantial surplus susceptible of being converted into capital for future production and into an environment which will spell increasing welfare and civilization. A great war interferes rudely with the results both of past accumulation and of current production. The real costs of a war are to be measured by the diminution of the social patrimony and by the diversion of current social output from productive to unproductive channels, *i. e.* by changes both in the fund of accumulated wealth and in the flow of social income.

In drawing up the balance sheet we should have to put on the one side the diminution of the fund of wealth as represented by (a) the destruction of private property, (b) the loss of government accumulations, (c) the impairment of natural resources and (d) the decrease in the social output due to the reduction of the labor force by military service and the fortunes of war. On the other side of the ledger, indeed, we should have to put such capital items as (a) indemnities or booty, and (b) the acquisition of new territory; and on the income side, the results of (c) speeding up of production, (d) the more favorable economic situation attained by the political results of the war, and (e) changes in the methods of industry and the relation of capital and labor which may conduce to greater efficiency and increased output.

Although not all of these items are susceptible of being put in terms of dollars and cents, the real costs of a war may be characterized as the balance of the debit side over the credit side in the above account.

While this contrast between the money cost and the real cost of the war is important, it does not yet go to the root of the matter. In order to grasp what is meant by the real costs of a war, we must revert to the distinction familiar to the student, but so often neglected in popular discussion, between objective and subjective costs.

By objective costs are meant the costs incorporated in the goods, commodities and services that are used for the war, that is, the money value of all materials consumed and all services furnished for war purposes. In contradistinction to the objective costs, however, are the subjective costs. The essential idea here is that of sacrifice. The production of everything costs some sacrifice and all sacrifice involves pain, either the pain of doing something distasteful or of refraining from doing something pleasurable. Sacrifice in other words is involved both in labor and in abstinence. The surplus of results over subjective costs constitutes the welfare or the real wealth, both material and immaterial, of society. In a community based upon slavery or where the laborers, with an abject standard of life, are compelled to work sixteen hours a day, there may be a great surplus of production and in that sense great wealth. If, however, slavery is abolished or the laborers acquire a shorter working day and a higher standard of life, not only may there be the same output of material things as before, but there will be a greater surplus over subjective costs, and, as a consequence, an increased communal welfare and a higher stage of civilization.

As a result of the machinery of our social order subjective costs are commonly translated into objective and money costs. If a machine is invented which cuts in half the period needed for the production of a particular commodity, we speak of halving its cost. Instead of two men being required to accomplish the result, only one man is now needed. So far as the community is concerned, the subjective cost or sacrifice is reduced; and under a state of competition, this decrease in subjective costs will reflect itself in smaller objective costs and lower prices. So, in the same way, just as the greater efficiency of the laborer will result in a larger output of material commodities, the greater abstinence involved in the ordinary economy practiced by the members of a community will be followed by an increased accumulation of productive capital. The subjective costs involved in economy are undoubted, but the additional results which ensue from the practice of economy are so much

greater that there remains a substantial surplus. In other words net sacrifice or burden is diminished. The real wealth of a community depends upon net sacrifices or subjective costs. Where the same output is attended with less sacrifices we have prosperity. Where increased sacrifices result in still greater output we again have the prosperity that goes with lessened net subjective costs. When, however, economy changes into privation, the increased material results may be too dearly purchased: although there may be more material wealth for the present, there is less real wealth or welfare because there is more net sacrifice. So, in the same way, when increase of production is attended with the sapping of the vitality of the labor force, the nominal efficiency really becomes inefficiency and the greater material wealth of the present signifies less real wealth or welfare. The total net burdens upon the community are greater.

The important criterion in the economic welfare of a community is therefore the subjective cost or sacrifice. This is as true in war as in time of peace. Just as the subjective cost of an individual consists of the effort involved in labor and the abstinence involved in the foregoing of enjoyments, so the subjective costs of a community due to a war consist of the burdens of additional labor which it must expend and the diminished consumption of goods and services which it must forego. The objective costs of a war are material commodities and services; the subjective costs of a war constitute the real burdens resting on the community. The true costs of a war are the net sacrifices or subjective burdens which result from the transition from a peace economy to a war economy, and which are connected with the fundamental processes of production and consumption. They consist, on the one hand, of all the efforts involved in the transfer of enterprise and investments from the ordinary channels of production to the new fields of primary importance in the war. They consist, on the other hand, of all those efforts involved in the reduction and the change of consumption which will serve to counterbalance, in part at least, the inevitable reduction of social output. The net result measured in terms of aggregate sacrifice or subjective cost constitutes the real burden of a war. The problem that confronts us is to analyze the results of various fiscal expedients upon these changes in production and consumption from the point of view of the subjective costs or the real burdens resting on society.

II. Can the Costs of a War be Diminished in the Present or be Shared with the Future?

After this preliminary explanation we may proceed to consider how the costs of a war can be diminished in the present and in what way, if any, they can be shared with the future.

So far as objective costs are concerned, it is manifest that they belong, for the most part, to the present. The services must be performed by men now living and the commodities consumed in the war must be produced before they are consumed. In several respects, however, the present may benefit at the expense of the future, even so far as objective costs are concerned. These considerations deal respectively with capital and with labor.

In the cost of production we ordinarily include sums set aside for depreciation of plant. It is possible, however, that the exigencies of the war situation may require such an immediate increase of output as to divert to current production the funds which would otherwise be devoted to the maintenance of plant. The result is that the future will possess a less effective plant than would otherwise be the case. Or, in the second place, the capital diverted to purposes of war production may become useless after the return of peace. Thousands of munition plants, for instance, may have been constructed solely for war purposes with machinery that it would be difficult or even hopeless to convert to other purposes. The capital which would otherwise be available at the conclusion of the war for peace production will to this extent have been lost. The production in the future will be less than would otherwise have been the case.

What is true, however, of capital, is equally true of labor. It is possible that the speeding up of production involves such a strain on the laborers, resulting from long hours, night work and unremitting toil, as to impair their health and transmit to the future a body of workmen less efficient than they would otherwise have been. It may take some time, either by the more careful handling of the then existing workmen, or by the immigration of men of a higher standard and stronger physique, before the balance is restored. And, on the other hand, while a diminished consumption is assuredly desirable during a war, the enforced decrease of consumption which may result from the fortunes of war may bring about such privation in the mass of the community as to sap their energies and reduce their future efficiency.

In all of these ways, the burden of the present may be lightened at the expense of the future. There is more production, that is, more commodities and services now, but there will be relatively less in the future. Even in the case of objective costs the present may benefit at the expense of the future.

Subject to these limitations and exceptions, however, it may be said that the objective costs of a war are, in the main borne by the present. This is true irrespective of whether the expenditures designed to furnish these commodities and services are met by loans or by taxes.

When we deal with subjective costs, however, the situation is very different. Subjective costs may be reduced without any of the burden being shifted to the future; or they may be diminished while a part of the burden is borne by the future. It is obvious that neither of these results can be obtained by the process of taxation. The tax imposed upon the present generation may indeed have some repercussion upon the future. If an excessive tax is imposed upon capital, it may so reduce existing resources as to make future production smaller. Even if the tax is not excessive, the taxpayer, instead of decreasing consumption or paying the tax out of current income, may draw on the funds which he would otherwise have devoted to productive purposes. Or, finally, if an excessive tax is imposed upon incomes or profits, it may so diminish the tendency to enterprise that the baneful consequences will endure. In all these cases, however, although the future undoubtedly suffers, there is no diminution in the burdens that rest upon the present. The present taxpayers bear the burden, even though the future taxpayers also bear a burden.

Is the same true in the case of loans? Can the burden upon the present be lightened by the issue of government loans? Are the subjective costs or sacrifices of the community in any way lessened by government borrowing? This brings up for consideration the theory of public credit.

The theory of credit, as it has been worked out by economists, is in reality simple. Credit is a phenomenon or transaction in which a part takes place in the present and a part in the future. If I lend a man money, I turn over to him now a certain sum and he turns over to me in the future the equivalent of that sum. When the sum has been paid the transaction is complete. If we deal with public

instead of with private credit, the situation is identical. The funds are turned over now by certain classes in the community who loan the money to the government and the transaction is concluded in the future, when the taxpayers furnish the money to return it to the bondholders.

How does it happen then that the utilization of credit diminishes the burden upon the present? How can the subjective costs of the war be lessened for the community?

In the case of private credit the subjective sacrifice of the individual is clearly diminished. This is obviously true of productive credit for otherwise credit would not have become so vital a fact in our modern industrial life. The reason why the business man borrows today is chiefly because he thinks that with the borrowed funds he can secure such a return as to insure an enhanced profit even after paying all interest as well as repaying the capital borrowed. The credit, therefore, in so far as it enables him to purchase more goods with the same outlay, or—what is the same thing—the same amount of goods with a smaller outlay, lessens his subjective cost. Moreover, not only is his subjective cost or sacrifice less, but his objective cost or outlay as compared with the return, is also smaller.

Even, however, if we deal only with consumption credit, that is, with money borrowed for mere purposes of consumption, the borrower may enjoy a gain. Although he is thoroughly aware of the fact that he will have to repay in the future, with interest in the meantime, the precise sum that he now borrows, he is nevertheless anxious to borrow. This is due to two facts: an underestimate of the future, and the possibility of repayment in instalments.

His sense of immediate need is much stronger than his recognition of the sacrifice that he will have to make in the future in order to repay the loan. It is the same feeling that overcomes us when we compare the foregoing of a good dinner tonight with the foregoing of a good dinner a year hence. Our present sense of sacrifice, that is, our real subjective cost, is smaller in the one case than in the other. This is true even though we may, at the end of the year, regret our action. In ordinary cases, however, the action will not be regretted but will be repeated another year.

But, secondly, and more important, private credit diminishes subjective costs not only by the mere process of deferring payment

but by making possible repayment in instalments. The essence of the situation is found here in the gradualness of the repayment. The aggregate burden of gradual repayment is less than the sacrifice involved in providing for the whole of the original amount outright at once. The individual who borrows may incur a gain despite the obligation ultimately to return the same aggregate amount in the future. If he did not incur this gain he would not continue to borrow.

We are now in a position to grasp the social importance of credit. Credit increases prosperity. If used for productive purposes, credit, while indeed not capital, works like capital and constitutes an aid to production. It renders possible the same amount of output with a smaller cost or sacrifice. It accomplishes this by taking the funds out of the hands of those to whom it is worth relatively little and putting it into the hands of those to whom it is worth more because they make it yield more. The man who lends money at 6 per cent does so presumably because he has a surplus capital from which he is content to receive 6 per cent interest. But the man who borrows the fund expects to make more than 6 per cent interest and to retain the surplus in the shape of profit. Could the lender utilize the fund profitably in his own business he would not lend the fund. But even where credit is utilized for purely consumption purposes, it is equally advantageous, because by deferring payment and by rendering possible repayment in instalments rather than in a lump sum, it lessens subjective costs or sacrifices. The social utility of credit is therefore quite clear. It increases the wealth of the community by lessening the subjective sacrifices of certain individuals and putting at the disposal of the community funds where they will be utilized to the greatest advantage, thus decreasing costs and increasing output. Society as a whole is thereby enabled to employ those services which can be more easily dispensed with.

The truth of this assertion is not invalidated by the fact that credit may be abused. If the man who borrows at 6 per cent puts the money into a business which does not earn 6 per cent, the community, as well as himself, suffers for his mistake. So, in the same way, if an improvident individual borrows for consumption purposes and finds that he becomes more and more hopelessly entangled with the passage of time, he may find it impossible to meet the debt

even in instalments and his easy-going reliance upon the future may cause his ruin as well as loss to the lender. Because, however, an essentially sound institution may be abused is no argument against its essential soundness. Credit, like speculation, would not have become the outstanding feature of our present economic organization if it did not fulfill a socially useful function. The modern economy is essentially a credit economy.

Public credit shares this character. The chief difference between public and private credit is in the relation of consumption credit to production credit. While the government, like the individual, often borrows for productive purposes, as for a government railway or a municipal subway, most existing national loans are the result of consumption credit. It is fairly well agreed that just as a prudent individual ought not to borrow for purposes of ordinary consumption, so the government ought not to borrow to meet its current expenditures. The real differences arise when we consider extraordinary expenditures.

There are three points in which public credit differs from private credit. In the first place, extraordinary expenditures for unusual consumption are not so apt to occur in the case of the individual as in the case of the government. Most individuals are able to provide a reserve fund against a rainy day. Government revenue, however, ought properly never to exceed current expenditures. As a consequence, when an extraordinary emergency arises, as a war, the utilization of consumption credit becomes legitimate. In the second place, the individual lives only his own life; if he borrows largely for consumption purposes he will not always find it easy to repay the debt. The state, on the contrary, is eternal. The government, accordingly, has a much longer time in which to pay off a debt. If, for any reason, it becomes desirable to postpone the payment of the debt to the distant future, the justifiability may be stronger in the case of the government than in the case of the individual.

In the third place, what seems to be consumption credit may, in the case of the government, partake of the characteristics of production credit. A legitimate war is either for defensive purposes, that is, to maintain the existence of the state, or for offensive purposes, in order to procure for the state certain territories or rights to which it thinks itself entitled. Since in both of these cases a foun-

dation is laid for continued or even greater prosperity, the expenditures may in a sense be called productive in their nature. Whether a particular war is actually of that character may be a question; but surely no nation will enter upon a great war unless it is deemed legitimate. And if the general sentiment of the nation justifies the war, if the ends to be achieved transcend the sacrifices that are incurred, the war expenditures may be considered in the broader sense of the term productive.

For these three reasons, therefore, public credit may be considered even more important than private credit. Just as private credit is socially useful or productive of wealth and welfare, so public credit may be at least equally beneficial. Its utility consists in the fact that, through borrowing from those in possession of the capital rather than taxing all the members of the community, whether or not they have the capital, it lessens subjective costs or sacrifices and puts at the disposal of the government those services in the community which can be most easily dispensed with.

It might be claimed that the advantages of private credit do not attach to public credit because in the one case we are dealing with different classes in the community, and, in the other, with the community as a whole. Why would not the same advantages be secured, it might be said, by taking from the possible lenders the same amount in the shape of taxes? This argument, however, is really invalid. For the situation contemplated is not only most unlikely but virtually impossible. Under every system of taxation which has hitherto existed—in democracies as elsewhere—we find some taxes at least levied on business, on consumption, on exchange and on other sources than wealth. Even, however, if the tax system were to be so changed as to consist exclusively of taxes on accumulated wealth and incomes, it by no means follows that the funds would be forthcoming from the individual taxpayers in precisely the same proportions that they would have been supplied by the individual bondholders. For some recipients of large incomes, at least, would surely give up a greater sum as an investment bearing interest, than they would hand over as a forced contribution representing a dead loss. The psychology of the situation consists in the difference of the reaction to a voluntary as contrasted with a compulsory act. Even if only a few individuals contributed it would still remain true that the utilization of public credit would

in this way put at the disposal of the government the services in the community most easily dispensed with. In order to invalidate this statement it would be necessary for the government to take by taxation from each individual absolutely everything above the necessary means of subsistence. Only then would this particular argument as to the advantage of loans over taxes lose its force.

But even in this most unlikely case, where precisely the same sums would be raised from each taxpayer that would otherwise be contributed by each bondholder, it nevertheless remains true that loans imply a lessening of subjective costs or sacrifices. For although the taxpayers of the future have indeed to repay the loan, they do not have to pay the amount all at once as would be necessary in the case of the sums being raised immediately by taxation. Just as in private credit the aggregate burden of gradual repayment is less than the sacrifice involved in outright provision of the original amount, so in the case of public credit the social sacrifice involved in the periodic payment of the smaller sum represented by the interest and amortization charge is less than the burden involved in providing the entire amount in a lump sum. The phenomena of interest and of credit, by their very nature, imply that the burden of a successive series of partial payments is less than the burden of the total original payment. Just as the individual who borrows may incur a gain, despite the obligation to return the same amount in the future, so the community which borrows may incur a similar gain. This net gain in the case of public credit is represented by the smaller burden involved in the amortization quota.

If, then, it is true that the utilization of public credit may involve a lessening of subjective costs or real burdens upon the community, can it in the second place accomplish this by transferring a part of the burden to the future?

It might plausibly be argued that this is impossible. It might be said, for instance, that while it is true that the future taxpayer suffers a burden in so far as he has to pay taxes in order to raise the funds which are due to the bondholder, the only result is a transfer of the burden from one class in the community to the other. The taxpayers, it might be said, suffer a disadvantage, but the bondholders who have their loan repaid to them secure the benefit. Since the benefits counterbalance the disadvantages there is no net burden.

This argument, however, is fallacious. When the bondholder

invests in the loan he suffers indeed a sacrifice in the sense of giving up the funds which he might otherwise employ. This sacrifice indeed is compensated and more than compensated by a benefit. The benefit, however, that accrues to him is to be measured by the annual interest that he receives on the bond. If he had not invested in the government bond he would have invested in something else or would have allowed his money to remain in the bank. In any case he would simply have gotten interest on his capital; and it is immaterial whether his capital is represented by a deposit account in the bank or by a private security or a public bond. The benefit that the bond-holder receives in return for the sacrifice of yielding the money is the accumulated annual interest on the bond. By the time that the bond falls due there is no more benefit accruing to him. The bond is always salable at the market price. Even before it falls due, the holder can dispose of it and get as much as he could have gotten by waiting until the expiration of the loan. If, as often happens, the bond stands at a premium, he could even get more by selling it before hand. Or if he does not dispose of his bond, he can utilize it as security for a bank loan just as he would otherwise utilize an industrial bond or any other security. In reality, therefore, instead of speaking of a benefit accruing to the holder when his bond is paid off we ought really to speak of an additional burden or sacrifice imposed upon him. For now he will have the trouble of reinvesting the funds. Long-time bonds are in fact generally preferred by the investor in order to obviate this necessity of reinvestment. The fallacy involved in the contention that the sacrifice imposed upon the future taxpayer is counterbalanced by the benefit accruing to the bondholder thus consists in the failure to realize that there are no benefits then accruing to the bondholder. Whatever benefit may have accrued to him consists in the safekeeping of his money and the annual interest that has been paid. When the bond falls due the benefits cease. There is, if anything, a burden rather than a benefit now accruing to him.

There is another fallacy lurking in the statement that the burden upon the future taxpayer is compensated by the benefit then accruing to the bondholder. There is indeed a burden upon the future taxpayer but not of the kind imagined. Public debts of large amounts are never paid in the manner supposed. When a public debt falls due it is not paid out of the proceeds of taxes levied

upon the taxpayers of that particular year. If the debt is not refunded, but actually paid off, it will be extinguished by utilizing the funds which have been accumulated for a term of years. If there is a sinking fund, the burden upon the future will be represented by the annual amortization quota. In such a case the burden will be borne not by the taxpayers at the time when the bond falls due, but in instalments by the successive annual taxpayers beginning with the year when the bond was first issued. The same is true if the bonds are serial bonds the instalments of which fall due periodically. In this case only the burden representing the last instalment will be borne by the taxpayers at the expiration of the loan. If we take the sinking fund bond as a type it may be said that the benefit accruing to the bondholder is represented by the accumulated interest and that the burden resting upon the taxpayers is composed of the entire debt service, that is the interest charge together with the amortization quota, since the interest charge figures on both sides of the ledger as benefit and as burden. The amortization quota is the net burden resting upon the successive contingents of taxpayers until the sinking fund is completed or the debt is entirely paid off. That this net burden upon the future may be outweighed—and in general more than outweighed—by the net benefit accruing to the present has been indicated above.

We may, therefore, consider it as established that it is possible, not only to diminish the subjective sacrifice on the present, but also to put a share of the burden upon the future. It has also been established that the device of public credit necessarily accomplishes the second result in effecting the first. The problem at issue is the cost of making final settlement of the war bills of the government. This settlement must be made by taxpayers and it can be postponed. If the government borrows it obtains money from people who get a good investment and who are making a very slight sacrifice. The sacrifice on the part of a purchaser, rich or poor, of a liberty bond is much less than the sacrifice of a taxpayer who gives up his money without return. The sacrifice of the taxpayers who must pay the bills can be postponed and this postponement may involve the undoubted advantage of spreading large payments over a period of years.[2]

[2] Mr. Hartley Withers, who originally held this view, has been so influenced by the rather hasty pronouncement of some American writers that he has recanted. *Cf.* his *Our Money and the State*, 1917, p. 29. But even he balks at

Public credit, if correctly employed, may, in shifting a part of the subjective sacrifice to the future, lessen the total real costs of a war on the community as a whole, viewed as a continuing entity.

III. OUGHT THE BURDENS OF A WAR BE SHARED WITH THE FUTURE?

Although it is possible as we have just seen to shift a part of the burden from the present to the future, the next problem is as to when, if ever, this is justifiable. The point at issue here, be it observed, is not as to the relative advantages of loans *versus* taxes, but as to the classes of cases when loans are to be permitted as a matter of principle. In order to solve this problem we need a more detailed analysis of public expenditures.

For our purposes all public expenditures may be divided into two classes: current and capital expenditures. Current expenditures are those incurred for carrying on the ordinary business of government while maintaining its property or plant at the customary level. Capital expenditures are those incurred for increasing the property or plant of the community.

Capital expenditures may again be divided into expenditures for self-supporting and for non-self-supporting purposes. Expenditures of the first kind are seen in the case of water-works where the revenues are expected to defray more than the cost. Here it is entirely legitimate to issue bonds, because although the burden upon the present is diminished there will be no burden upon the future. By the time the bonds expire, a sinking fund will have been accumulated out of the revenues which will also in the interval have provided for the payment of the annual interest. It is for this reason that in the city of New York, for instance, not only the water and dock bonds, but those issued for any municipal improvement the revenue from which will defray the interest together with an amortization quota, are by law excluded from being counted in the debt subject to constitutional limitations as to size. If such

the proposition that public borrowing is always unjustifiable, and accepts it as defensible when employed for productive purposes (*Ibid.* p. 43). Had he pushed his analysis a little further he would have realized the fact that no distinction can be drawn between consumption and production credit, and that the economic utility of credit may attach equally to both forms.

improvements had to be paid for out of taxes they would frequently not be made at all.

Many capital expenditures are, however, incurred for non-self-supporting purposes. The funds, in other words, are spent for additions to the community plant or property from which no, or only little, money revenue is expected. The dividends are, in whole, or in part, of a non-material kind. Such expenditures may be further subdivided according as they are recurring or non-recurring. An example of the first kind is a schoolhouse. A schoolhouse represents an addition to the capital or permanent property of the community. Under the American system it is not used for purposes of revenue, as no fees are charged. In a growing city where population is continually increasing it is obvious that more schoolhouses will have to be built every few years and perhaps even annually. Since, therefore, the same capital expenditure will have to be made every year, or almost every year, it is proper that it should be paid for every year, or almost every year. In other words the cost of schoolhouses in a constantly growing community ought to be defrayed out of taxes on the pay-as-you-go principle. The situation is, however, different with the other class of non-self-supporting capital expenditures, namely, those of a non-recurring kind. Take, for instance, the purchase by the government of the telegraph or telephone system with the intention of so reducing charges as not even to meet running costs. Or, better still, take the building of a great art museum in a city or the purchase of a comprehensive system of parks. In the ordinary course of events a considerable period would elapse before another art museum or another such system of parks will be needed. Since the museum or park will continue to benefit the community as a whole for many years there is evidently an impropriety in putting the entire burden upon the taxpayers in any one year. To attempt to do this would not only be inequitable in itself, but would also defeat its purposes; for the larger the expenditure, the more disinclined would the taxpayers of any one year be to authorize the outlay. The probable result would be delay, or even complete failure, to authorize much needed improvements. In the case, therefore, of non-recurring, non-self-supporting capital expenditures the utilization of public credit is clearly permissible.

There is of course a border line or twilight zone where the arguments as between loans and taxes are rather evenly balanced. Take the New York court house problem as an example. It is difficult to say whether this ought to be called a recurring or a non-recurring expenditure. A new court house is indeed not needed every year. It is only a few decades, however, since the present court house was rebuilt. The same is true of bridges in a rapidly growing community. More than a certain number of bridges will probably not be required for a long time. But in the interval new or better bridges may be needed every few years. Where the opposing arguments are so close it is evidently desirable to defray the outlay partly out of loans and partly out of taxes.

Opposed to the capital expenditures of government are the current expenditures. These may be divided into ordinary and extraordinary expenditures. Ordinary expenditures are those which are incurred for the ordinary work of government from year to year as it may be anticipated and arranged for in the budget. As to these there is no question but that they should be met entirely out of the proceeds of taxes. One of the glaring abuses of the old Tammany régime in New York City was the way in which they kept the tax rate down by borrowing money for the ordinary current expenditures; as, for instance, the issue of twenty-year bonds for the purchase of brooms which lasted only a few months.

Extraordinary expenditures, on the other hand, are those which cannot well be foreseen or predicted with any reasonable accuracy; as the result of some unforeseen contingency they are out of the regular order, that is, they are extraordinary.

Extraordinary current expenditures may, however, like the capital expenditures mentioned above, be subdivided into recurring and non-recurring expenditures. A non-recurring extraordinary expenditure is typified in the case of the Chicago or the Boston fire. Since the outlay needed to keep these communities alive, or to repair the ravages of the conflagration, may not be expected ever to occur again, or certainly not for a long future, it would be manifestly improper to saddle the entire burden upon the unfortunate taxpayers of that particular year. The probability is that if any attempt were made to do so the needed repairs could not be made at all, or certainly not to the extent that would be appropriate. Of a similar character would be the extraordinary expenditures occa-

sioned by a great flood or famine in a country unaccustomed to such catastrophes.

On the other hand, there are certain classes of extraordinary expenditures the recurrence of which may be reasonably expected although the date of the recurrence is unknown. This would be the case with earthquakes in a country like Italy or famines in a country like India or tornados in some parts of the United States. In such cases it is entirely proper to accumulate out of the proceeds of taxation a fund which can ultimately be used for that purpose when the occasion arises. Since the contingency may occur at more or less periodic intervals it would manifestly be unwise to shift the burden upon the future; for before the future comes another contingency of the same kind may have occurred.

When finally we come to such expenditures as these of modern wars the question of exact classification is attended with considerable difficulty. It is indeed true that as long as human nature remains what it is and the fundamental causes of an economic and racial character are not removed, every nation must look forward to periodic outbreaks of this scourge. Certainly there is nothing to predispose us to the belief that the history of the world is to be so totally changed in the year 1917. In a certain sense, therefore, the extraordinary expenditures of a war may be put in the class of recurring expenditures. The recurrence, however, of such a gigantic war as the present world conflagration cannot be regarded as immediate. It is to be expected that it will take at least several decades for the various belligerents to recover from the strain and stress of the conflict. In the meantime, whether it be one decade or several decades that elapse, the benefits, such as they are, in any particular country necessarily attach to the intervening years. And at all events, it is not legitimate, even if there are no benefits at all, to put the entire burden upon those who happen to be taxpayers during the course of the war. When we speak of the distinction between the present and the future, it is not necessary to conceive of the future as the future generation or the future century. There are all manner of changes in the taxpaying abilities of the citizens within a century or even within a generation. And with reference to the particular circumstances of the present conflict, if this is a war to make democracy safe, it is certainly just that the coming

decades which will enjoy the benefits of security should bear some part of the cost of preserving it.

The conclusion, therefore, would be that in the case of a great war it would meet all the demands of justice to put part of the burden upon the present taxpayers and to shift the remainder upon the taxpayers of succeeding years with the understanding that all the charges of the war will finally have been met before the period when the recurrence of a similar outbreak is within the realm of probability. This conclusion in other words shows the essential legitimacy of utilizing both loans and taxes in times of war.

IV. THE DISADVANTAGES OF LOANS

The net gain involved in public credit may be impaired or even converted into a loss in three ways: (1) if exclusive use is made of public credit; (2) if the system of taxation after the war is materially changed to the disadvantage of the community; (3) if public credit is so abused as to lead to serious inflation. Let us consider each of these in turn:

1. All credit rests on a substratum of cash. Private credit is an adjunct of capital but it must depend on capital. The loans that a bank can make ought never exceed a certain percentage of the reserves. The volume of credit can always be greater than the amount of the cash reserve; but it cannot safely be independent of that amount. In the same way the attempt to finance a gigantic war entirely by loans without any solid basis of taxation would also represent unsound finance. The resulting loss of confidence would manifest itself in a depreciation of successive issues of government bonds and would ultimately cause embarrassment or disaster. But just as a bank may issue several dollars of credit for one dollar of cash, so a government may borrow for war purposes considerably more than it raises by taxation with equal advantage to all concerned. To finance a war entirely by loans is inadvisable; to finance a war in large measure by loans is legitimate. Employed in moderation and based on a solid foundation of largely increased war taxation, war loans are advantageous in reducing war costs. But the foundation of taxation must support the edifice of loans. Unless taxes are levied to an amount at least necessary to provide for the interest on the new loan, as well as for a reasonable amortization

quota or additional sums calculated to sink the debt within a reasonable period, the advantages of war loans will disappear This is the serious danger to which some of the belligerents, like France, Russia and Germany, have already succumbed in the present conflict.

2. If taxes during the war were to be raised entirely from those best able to pay, and if the tax system were to be so altered after the war as to bear with severity upon those less able to pay, the advantage of loans over taxes would be impaired. It might be claimed, for instance, that the ordinary system of taxation in peace time is influenced so largely by the richer classes that wealth escapes its share. As the result of a war, however, the wealthier classes will become more patriotic and will be more ready to contribute. Even if this should not be the case, the very immensity of the sums to be raised, it might be said, will make it impossible to secure what is needed from taxes on general consumption and will necessitate resort to taxes on wealth. To raise any part of war expenditures, therefore, by loans instead of by taxes simply means that the less affluent classes will ultimately have to pay more. This involves a serious social maladjustment.

It may be questioned, however, whether such an argument is not in reality illicit. For we have here a comparison not between loans and taxes but between two different systems of taxation.[3] It is conceded that if taxation after the war could be based upon the same general principles as taxation during the war, the entire argument would fall away.[4] But this, we are told, is exceedingly unlikely. The enthusiasm engendered by the war, which will make

[3] Professor Pigou, for instance, with whom this whole argument originated, does not compare taxes in general with loans in general, but taxes on the wealthy with taxes on the poor. "Under the tax method the rich and moderately rich really shoulder the whole burden of the charge that is laid upon them. Under the loan method they do not do this, because they are compensated afterwards through taxes laid for that purpose, partly on themselves, but partly on other and poorer sections of the community." *The Economy and Finance of the War*, by A. C. Pigou, 1916, p. 70.

[4] Professor Durand, for instance, tells us "If we could assure ourselves that the distribution of taxes after the war would be as the distribution of taxes during the war, there would be little choice between taxation and borrowing." *Financial Mobilization for War*, papers presented at the Joint Conference of the Western Economic Society and the City Club of Chicago, June 21 and 22, 1917, p. 18.

the wealthy willing to pay greater taxes, will subside after the war.[5]

The retort, however, at once presents itself: what if peace taxes should be better than war taxes? It might plausibly be argued that during the enthusiasm engendered by a war the great mass of the people, and not only the very rich, might be willing to endure extra burdens; whereas after the return of peace they would insist upon a more equitable distribution of the burden. As a matter of fact the fiscal history of our own Civil War would tend to bear out this theory. The tax system during the Civil War was composed to an overwhelming extent of burdensome taxes on the great mass of the community. The income tax, for instance, was slight as compared with the tax on manufactured articles. After the return of peace, on the other hand, these burdensome taxes were removed one by one and the income tax was among the very last to disappear. Instead of the tax system after the war becoming progressively worse or more unjust, it became progressively better, or less unjust. The same thing is true of the fiscal history of other wars.

In truth, however, such an interpretation would be just as invalid as the preceding one. There is no necessary nor probable tendency in the one direction or in the other. Some systems of war taxation have been better, and some have been worse, than corresponding systems of peace taxation. There is nothing in the nature of war or peace which will fundamentally affect the situation. No one class in the community has a monopoly of loyalty. History does not show that the rich are more patriotic than the poor. The real forces which make for more equitable taxation are the growing democratization of the community with an increasing realization of the principles of justice. Modern systems of taxation, in war as in peace, are everywhere more equitable than former systems because of the gradual prevalence of these two factors. There is no warrant for the assumption that the return of peace will check this progress of democratization. There is no adequate foundation for the belief that in a democracy the fundamental causes which make for justice

[5] Professor Durand bases his whole argument on the assumption that the post-war taxes would be less equitable than the war taxes. He concedes that "this is not a necessary result," but he believes that "the great political power of the well-to-do classes would almost certainly enable them, if they sought to do so, to shift part of the burden on the poorer classes, and they would probably seek to do so." *Op. cit.*, p. 26.

in taxation will be less strong in peace than in war. A faulty analysis of the history of taxation and of democratic progress is not a sufficiently firm basis on which to predicate the inferiority of loans.

3. The third disadvantage of loans is alleged to be the tendency to inflation. As to the dangers and shortcomings of inflation, the burdens of which are borne in large part by the less affluent classes, it is unnecessary to speak. That loans may possibly lead to inflation is undoubted; that loans necessarily lead to inflation or that they lead to more inflation than would be brought about by other methods of securing revenue, is quite another matter.

To what extent can it be said that loans lead to inflation? In the case of foreign loans the question can of course not arise so far as the home country is concerned. Domestic loans, however, may be derived from five sources:

(a) From the liquid or free loanable capital in existence. Large sums, the results of previous accumulation, are always found ready for investment in the financial centers. In the United States these are to a great extent loaned on the stock exchange and used for purposes of speculation.[6] The transfer of these funds from the stock exchange to the government will assuredly not lead to inflation. Rather, the contrary would be the case.

(b) From the surplus of current production. The annual surplus products of a community are ordinarily converted into productive capital through new investment. If these investments are turned into the channel of government bonds instead of industrials there is no tendency to inflation.

(c) From a change of investment. If investors are tempted to sell their foreign securities and to buy government bonds there is again no tendency to inflation. If they sell their domestic industrial securities in order to invest in government bonds, there will even be a tendency to the contrary. For the throwing of so many domestic securities on the market will tend to reduce their value—leading to lower, rather than higher, prices.

(d) From anticipated savings. Many a citizen of moderate means will invest in war bonds paying for them by the fractional certificates which he laboriously purchases out of the savings due to decreased consumption or increased production. This will not lead to inflation, but to the reverse.

[6] Professor Durand's criticism, *op. cit.*, p. 16, overlooks this important fact.

(e) From borrowing at the bank. It is only in this single case when the investor pays for his war bonds by borrowing from the bank, or when the bank itself subscribes to the war, that the undue extension of credit by the bank may lead to inflation. But, in weighing the probabilities, it must be remembered that this is unsound banking, and that every effort will be made to avoid it in a reformed system like the present. As a matter of fact we know that the banks have been urged to make only short-time advances on the new war loan. Moreover, even if this were not the case, the extension of credit to the bondholders would necessitate a partial withdrawal, at least, of credit facilities to the ordinary business enterprises, so that the inflation would be less than it really seems.

What we are considering, however, is primarily not whether loans cause inflation, but whether inflation is due to loans or whether there is anything peculiarly distinctive about loans in causing inflation. These considerations have almost entirely been overlooked in the discussion.

In the first place, there is no doubt that wars are always attended by inflation. But this inflation would ensue entirely apart from loans. The chief factors which explain the rise of prices during a war are the vastly augmented demands of the government, the dislocation of production coupled with the falling off in the social output, and the augmented supply of the currency. These are the fundamental causes which make for inflation and they will exert their effect irrespective of the choice between loans and taxes.

In the second place, it is a fallacy to suppose that if loans lead to inflation taxes will prevent inflation. Modern war taxes are to an overwhelming extent levied on business. The distinguishing features of our present system, for instance, are the high corporate income and excess-profits taxes. It is familiar to those acquainted with business conditions that many corporations whose profits are largely on paper, whose resources are heavily engaged, and who are anxious to utilize their profits in extending their operations, are even now preparing to borrow on a large scale from the banks or to issue short-time notes in order to pay their taxes. Were the war to be financed entirely, or to a large extent, by taxes instead of by loans, this resort to bank credit on the part of prudently managed enterprises would be still further emphasized. There is consequently less difference than is commonly supposed between a resort to loans

and a resort to taxes. Some of the funds may be borrowed from the banks in each case; and it is by no means certain that the borrowing is likely to be far more marked in the case of great loans than in the case of very high taxation.[7]

Finally it must not be forgotten that if there were no loans, or even insignificant loans, the tax system would, in all probability, not only be excessive in its burdensomeness, but, as we shall see, inadequate in its yield. With a failure of war taxation to defray expenditures the ultimate resort would then necessarily be to fiat money or inconvertible paper, which, as everyone concedes, would cause far greater inflation than anything else. Thus the failure to resort to loans in proper amount would almost inevitably, in a protracted contest, lead to the worst possible kind of inflation.

Is it not clear then that the relation between loans and inflation must not be exaggerated? Loans may indeed lead to inflation, but so may taxes lead to inflation; inflation is due primarily to other and more fundamental causes then either loans or taxes; and the attempt to avoid inflation by abandoning the use of loans will almost inevitably lead to far greater inflation in the end.

If, then, there is little reason for anticipating (1) any serious abuse of public credit, or (2) a fundamental and unfortunate change in the tax system after the war, or (3) any undue or peculiar tendency to inflation as a result of loans, it follows that a proper use of public credit may be of net advantage to society.

V. The Advantages and Disadvantages of Taxes

Up to this point we have adverted to the advantages and disadvantages of loans and by implication have considered some of the advantages and disadvantages of taxation. It may conduce, however, to clarity of exposition to marshal here some of the arguments which refer particularly to taxes.

The first advantage of war taxation is its effect upon consumption. As we pointed out at the beginning, the important point in the economic life of a community at war, as at peace, is to have

[7] It is significant that Professor Pigou, who was the first to put forward the inflation theory in war finance, is careful not to limit this probable eventuality to loans. He tells us explicitly: "If, as is probable in the case of very large levies, their (the rich) borrowings for war loans and war taxes exceed their normal borrowings in times of peace, there is likely to occur a certain amount of currency inflation." *Op. cit.*, p. 76.

a surplus of current production. This surplus must be measured in terms not simply of material output, but also of subjective sacrifices. The outstanding fact in every great war is the sudden and sharp reduction in production. Unless the consumption of the community keeps this slower pace the result will be disastrous. For although the community can rely to a certain extent upon the accumulations of the past and can also, as we have pointed out, defer some of the sacrifice to the future, a large part of the burden must be borne at present. The current consumption of the community must be cut down to the measure of the current production if there is to be any surplus.

The advantage of high war taxes is that they may help to bring about this result. But while this is true, the effects of taxation on consumption must not be exaggerated. In the first place taxation is not alone in affecting consumption. Consumption may be influenced by legislative prohibition and by rationing. In truth, during the present war, these factors have been of much greater influence than taxation. In the second place taxes are not the only fiscal expedient which can affect consumption. One of the chief points in the recent issues of war loans, here as abroad, has been the appeal to patriotism and the facilities afforded for investment in the loans, to be made good by current savings. It is true that taxes involve a compulsory, and loans only a voluntary, appeal to saving. But it would be a mistake to overestimate the influence of the former and to underestimate that of the latter in reducing consumption.

In the third place the beneficial effects of taxes upon consumption may be seriously exaggerated. If, as is true, war taxes largely assume the form of taxes on business enterprises and corporations, there will be almost no influence upon consumption; and the little influence exerted on consumption may be outweighed by the possible injurious effects on production, thus reducing instead of enlarging the social surplus. Moreover, even as far as individual income taxes are concerned, the results are by no means certain. On large and very large incomes the tax is not apt to be paid out of current income at all. The ordinary man of wealth will be much more likely to draw temporarily upon his capital during the war than to reduce his personal expenditures. Again, while it is true that very high taxes on small or moderate incomes will check consumption the danger is that we shall cause not only sacrifices, but

real privation, the disadvantages of which may counterbalance the advantages of a reduced consumption.

While, therefore, high war taxes may tend in part to reduce consumption, the effects and beneficial consequences can easily be exaggerated.

The second advantage of high war taxes is that the actual burden in times of war is really less than it appears to be. A war gives unusual opportunities to make immense gains and the profits secured by the war contracts are apt to be more or less widely diffused throughout the community in the form of high wages and general business prosperity. It is for this reason that the tax on war profits, or on excess profits, has everywhere become a fundamental feature in the tax program. In the second place the higher price level due to the inflation that always accompanies a war makes a given tax a much smaller relative burden. And, thirdly, it is more economical to levy high taxes during a war when the diversion of current income to ordinary investment of capital is relatively small than to postpone the tax until a time when the need of capital investment will again become acute.

These are the undoubted advantages of high taxes. But over against the advantages must be set the disadvantages.

The first drawback is the inadequacy of taxation during a war. The protagonists of high taxation seem to think that the entire or well nigh the entire expenditures of a war may be met with taxation.[8]

Even a superficial glance at the facts ought to show the baselessness of such an assumption. We do not venture to utilize here any figures as to national wealth or social income because of the worthlessness for scientific purposes of any such computations. But we should like to emphasize the fact that the limit of taxation is to be measured not by the social income, but by the social surplus, that is, the excess of the net income over the consumption of the members of society. This social surplus is very much less than is often represented. In England, for instance, where the tax on the moderate incomes has been raised to 25 per cent and on the larger incomes up to 42½ per cent, the net additional receipts from the income

[8] So, for instance, Professor Durand says: "If during the war itself highly progressive taxes were levied sufficient to meet the war expenditures," *op. cit.*, p. 26. The same thing is true of Professor Sprague and some other American writers. Professor Pigou, however, is much more cautious in simply advocating increased revenue from high taxation.

tax amount to about one billion dollars. Even if we assume that the recipients of moderate incomes could endure the privation of an additional 25 per cent of the income, thus doubling the returns; and if we further assume that on the higher grades it would be possible to confiscate the entire income beyond a small minimum, thus doubling or trebling the revenue, we should have as the conceivable maximum from the income tax in Great Britain between three and four billions of dollars. Again, if the excess-profits tax were increased from the present figure of eighty per cent, which yields about one billion dollars, so as to take in all of the profits, we would have another few hundred millions income. If, therefore, England were to tax the entire available social surplus through the highest possible income tax and excess-profits tax, the total revenue would be absurdly short of meeting the war expenditures which are already now over eleven billion dollars and which are gradually mounting. In order to meet even one-half of the war expenditures from taxation it would be necessary for Great Britain, in addition to confiscating incomes and profits, to impose immense burdens upon that part of accumulated wealth or property which is susceptible of sale abroad.

The figures *mutatis mutandis* would be similar in this country. In order to raise even one-half, not to speak of the total, of the nineteen billions required this year and of the still larger sums which may be needed as the war progresses, it would be necessary not only to take by taxation most of the smaller incomes and all of the higher incomes, but also to confiscate virtually all of business profits, and finally, after levying crushing taxes on consumption, to take such part of the existing private property of the United States as could find a ready market abroad. Even the mere statement of such a proposition carries its refutation on the face.

But if the inadequacy of sole reliance upon taxation is patent there are also well-founded objections to levying excessive taxes even short of this impossible total. Taxes may roughly be divided into taxes on wealth (income, property and inheritance taxes), taxes on business (taxes on profits, production and exchange), and taxes on consumption (import duties and excises).

The chief modern tax on wealth is the income tax. It is accordingly entirely proper that in time of war the principal reliance should be based on this source of revenue with a very much higher

graduated scale of progression on the larger incomes. But entirely apart from the extreme advocated by some of confiscating all incomes over $100,000[9] there are at least four dangers in excessive income taxes.

1. The administrative difficulties will be greatly increased. It is as true of the income tax as of the arithmetic of the customs that two and two do not always make four. Excessive import duties induce smuggling; excessive income taxes engender evasion. With such a delicately adjusted machinery as in the case of our income tax it is to be feared that excessively high rates will cause not only a disappointing yield but also an increasing inequality as between individual taxpayers.

2. If the rates are too high the tax may act like an excessive consumption tax and by pressing unduly upon the margin of comfortable existence cause great privation.

3. If levied chiefly upon the higher incomes it may seriously trench upon the sum ordinarily devoted to the educational, philanthropic and religious institutions and thus cause widespread injury to the immaterial interests of the community. This objection has only in part been removed by the recent amendment to our income tax law.

4. Excessive taxes on incomes will deplete the surplus available for investment and interfere with the placing of the enormous loans which will be necessary in any event. It might be replied to this last argument that the more you raise by taxes the less will have to be raised by loans. This does not, however, meet the point. For if the taxes are so high as to discourage industry they will obviously dry up the source of future incomes and thus deplete to that extent the surplus which would otherwise be available for future loans. Entirely apart from that fact, however, high taxes will interfere with loans in so far as the loans are financed even temporarily by the banks. If a would-be investor borrows from a bank, the amount of his credit will be in a certain proportion to his estimated profits. Every dollar's diminution of his prospective income will cause several dollars' decrease in the amount which he will think it prudent to

[9] This has been done by Professor Sprague in his address before the American Economic Association. *Papers and Proceedings of the Twenty-ninth Annual Meeting of the American Economic Association, December, 1916*, p. 211. Similar propositions were made in Congress.

borrow or which the bank will think it safe to lend. If, therefore, the income tax is so high as seriously to deplete his investing surplus, it will cause a far greater falling off in the amount which he can subscribe to the loan. It is significant that this is the chief argument that has weighed with the Chancellor of the Exchequer in England in refusing to increase English taxation.[10]

Excessive taxes on business again may have all manner of injurious consequences. Taxes on war profits are indeed not open to the same objections, but our tax on excess profits is far more than a tax on war profits. When they are too high, they tend to check the needed transfer of industry and of investment to war purposes just at the time when new enterprise is desperately needed. Although our tax can by no means yet be called excessive, it is well known that in several important cases it has already begun to exert such a repressive effect.

The evils of excessive taxes on exchange and consumption are so familiar that they need not be recounted here.

It will be seen, therefore, that the dangers of excessive taxes are not to be overlooked. The anti-social consequences of excessive taxation are perhaps more to be emphasized than the similar evils of excessive loans.

It is important, moreover, that the public mind should be informed not only as to the dangers of excessive taxation, but also as to the inevitable failure of exclusive reliance upon any single group of taxes. It would be in the highest degree unfortunate if through emphasis upon such slogans as "conscription of wealth" and the like, the general citizen body acquired the feeling that war taxation meant immunity for themselves. Just as the war from a military point of view can be won by putting forth the united efforts of the nation, so the war can be won from the fiscal point of view only by reliance upon the ability of the entire citizen body whether rich or poor.

[10] Mr. Bonar Law has stated this several times, the last time on August 13, 1917: "I quite admit that in financing the war the government has to get the largest amount out of taxation which is compatible with maintaining the financial security of the country; but I have said many times that there comes a limit at which if you keep on increasing taxation, you might give up all hope of raising money by loan. It is obvious that if you tax to such an extent as to destroy the financial position, you must abandon all hope of loans." *Parliamentary Debates,* vol. xcvii, p. 944, 945.

Let there be no misapprehension about the thesis of this paper. We are by no means opposed to high taxation. On the contrary we believe it is essentially sound finance to raise far larger sums from taxation in war than in peace. We have no lance to break for the exaggerated policy of France or of Germany. But in considering the limits of taxation one is apt to overlook obvious facts. In 1913–1914 Great Britain raised by taxation 163 million pounds; in 1916–1917 514 million or 351 million pounds additional, *i.e.*, about 215 per cent more. The United States raised by taxation in the four years 1912–1915 an average of 648 million dollars annually.[11] The War Revenue Act of 1917, which is expected to yield $2,510,000,000, increases the taxes by 387 per cent. What it really means to quadruple the burdens of taxation is not generally recognized by those who speak so glibly of defraying the entire expenditure of a war from taxation. That we have reached the limit, however, is by no means sure. The practical situation that confronts us is this. The additional war expenses this year will be about nineteen billions, of which about four billions are still to be provided. It is, in our opinion, entirely feasible to raise more money by taxation, perhaps another billion or one and one-half billions from the income tax, the excess-profits tax and new excise taxes. The time may even come when we shall have to secure a still further revenue from taxes on accumulated wealth. But even with all these resources it is indubitable that an important reliance will continue to be, as it ought to be, on loans. The enthusiastic plan, so hastily advanced by some American economists of financing the war "mainly, if not entirely" from taxation, and even the fifty-fifty per cent program originally advanced by the executive, are so far beyond the practicable or economically defensible that they may safely be neglected.

VI. CONCLUSIONS

The conclusions from the above analysis are as follows:

1. Government loans are indispensable to a sound war finance. If properly used, they tend to lighten the burden of a war.

[11] 1912 .... $632 millions
1913 .... 662 millions
1914 .... 672 millions
1915 .... 629 millions

2. To attempt to finance a war exclusively through loans is short-sighted.

3. To attempt to finance a war exclusively through taxes is suicidal.

4. War taxes should be large and immediate, but should never be stretched beyond the point where they begin to lessen the social output, to hamper the transfer of pre-war to war production, or to press unduly on desirable consumption.

5. War taxes must be high enough to assure a solid foundation for the loans and to ensure a rapid payment of the debt within a relatively short time.

6. At the outbreak of a war, and during the early period, very much greater sums ought to be raised by loans than by taxes.

7. As the war proceeds a continuously larger amount can and should be raised by taxation, although at no time will the government be free from the necessity of relying to a considerable extent upon the use of public credit.

In the Civil War, as in some of the belligerent countries today, it is undoubted that too little was raised by taxes. At present it is probable that even England could safely raise somewhat more than the existing 17 or 20 per cent of war expenses by taxation. We could profitably go somewhat higher. But between the 25 or 35 per cent, which even we have not yet begun to reach, and the 80 or 100 per cent which has seriously been suggested in this country, there is an immense chasm. Let us, indeed, be careful to avoid the dangers to which France and Germany have succumbed, but let us not be led by a faulty analysis or a misplaced enthusiasm into the devious by-paths of unsound finance and of hazardous economics.